

## Contents

16.1	Introduction	16-1
16.2	Background	16-1
16.3	Federal Programs and Future Water Planning and Development	16-1
16.3.1	Bureau of Indian Affairs	16-2
16.3.2	Bureau of Land Management	16-2
16.3.3	Bureau of Reclamation	16-2
16.3.4	Cooperative Research, Education and Extension Services	16-2
16.3.5	Corps of Engineers	16-2
16.3.6	Environmental Protection Agency	16-6
16.3.7	Farm Service Agency	16-6
16.3.8	Federal Emergency Management Agency	16-7
16.3.9	Fish and Wildlife Service	16-8
16.3.10	Forest Service	16-8
16.3.11	Geological Survey	16-9
16.3.12	National Park Service	16-10
16.3.13	Natural Resources Conservation Service	16-10
16.3.14	Rural Development	16-12
	<u>Table</u>	
16-1	Wilderness Study Areas	16-3
16-2	Candidate, Threatened and Endangered Species	16-9
	<u>Figure</u>	
16-1	Wilderness Study Areas	16-5

# Southeast Colorado River Basin

## Federal Water Planning and Development

### 16.1 INTRODUCTION

This section of the Southeast Colorado River Basin Plan briefly describes the current roles and level of responsibility of the 14 federal agencies involved directly or indirectly with the planning and development of water resources within the basin. Their roles vary from regulation, planning, design and construction of water development projects to the protection of water quality, the environment and habitat for various fish and wildlife species. Some federal programs have been reduced or eliminated forcing local water agencies to seek technical and financial assistance from state water resources agencies or from other sources.

### 16.2 BACKGROUND

The over-riding role of the federal government in the area of water resources has changed significantly over the years. From the late 1930s to as recently as the early 1990s, federal agencies were involved in the planning, design and construction of major water and land reclamation projects. Most of these projects have resulted in the development of affordable and reliable sources of water for all domestic water users.

However, future water development projects will, in all likelihood, be pursued by local and state agencies as the role of some federal agencies has significantly changed. Agencies such as the Bureau of Reclamation are more actively involved with environmental issues and programs to improve the operations of existing project facilities. The Natural Resources

Conservation Service has changed from watershed programs for primarily flood control and irrigation water management to assistance with water quality, erosion and other environmental concerns. As a result, water provider organizations, municipalities and some private industries are relying more on state agencies to replace federal water project development expertise and related funding programs.

*As a major land holder, activities of the federal government impact nearly everyone who lives in or visits the area.*

### 16.3 FEDERAL PROGRAMS AND FUTURE WATER PLANNING AND DEVELOPMENT

Perhaps the largest federal players in water and land development are the agencies within the departments of Agriculture, Army, Interior, Environmental Protection Agency and Federal Emergency Management Agency. The programs provided by these agencies are comprehensive and impact most all aspects of water development, quality, supply, distribution, use and disaster management. These agencies and their activities are briefly described below.

### **16.3.1 Bureau of Indian Affairs**

The Bureau of Indian Affairs has area offices throughout the country. The office in Phoenix, Arizona covers southeastern Utah and there is a field office in Blanding. The bureau works cooperatively with the Indian people and their tribal leaders. The protection of rights comes from the Office of the Director of Trust Responsibilities. This includes matters involving water rights, land titles, hunting and fishing rights and regulation, zoning, and other land uses.

The goal of the bureau is to assure effective and productive use and development of the resources, including water resources. They work with the Navajo Tribe and the Ute Indian Tribe in San Juan County and the Northern Ute Tribe regarding lands in Grand County.

### **16.3.2 Bureau of Land Management**

The Federal Land Policy and Management Act of 1976 gives the Bureau of Land Management (BLM) authority for administration of all public lands and resources under its jurisdiction. The quantity and quality of water resources are key factors in managing land and aquatic and recreational resources on public lands throughout the state. The BLM manages riparian habitats of springs, seeps, streams, lakes, reservoirs and ponds to help provide high quality water resources for beneficial downstream uses. BLM participated in the Montezuma Creek River Basin Study. This was an interagency study to quantify the aerial extent and amount of erosion and to determine the feasibility for treatment of problem areas.

The BLM manages the Dark Canyon and Grand Gulch Primitive Area, and the Mule Canyon/Butler Wash and Sand Flats/Moab Slickrock Bike Trail Recreation Sites.

There are 34 wilderness study areas listed in the "1999 Wilderness Inventory Report to the Secretary of the Interior" that are located in the Southeast Colorado River Basin. This inventory was implemented to reevaluate the original study completed under the 1976 Federal Land Policy and Management Act. The wilderness study

areas are now the subject of considerable debate. The wilderness study areas designated in the 1999 report are listed in Table 16-1 and are shown on Figure 16-1.

### **16.3.3 Bureau of Reclamation**

Historically, the Bureau of Reclamation had the responsibility to design and construct large water projects and related facilities. The bureau recently completed the Dolores River Project in the upper reaches of the Dolores River Basin in Colorado. This project could provide supplemental water for municipal, commercial, industrial and agriculture uses to several communities in San Juan County. In the future, the bureau's responsibilities will likely change more to the study of water quality, recreation and dam safety issues at its major facilities or projects.



Grazing on public lands

### **16.3.4 Cooperative Research, Education and Extension Services**

This agency is assigned the responsibility of administering various programs associated with cooperative state and other research programs. They are the information and education arm of the Department of Agriculture.

### **16.3.5 Corps of Engineers**

The Army Corps of Engineers (COE) offers assistance to a number of public agencies/entities to deal with water related problems that are relatively large in scope and beyond the capabilities of smaller agencies to manage. An agency can take advantage of

Table 16-1  
WILDERNESS STUDY AREAS

Wilderness Study Areas		Area Inventoried (acres)			Area With Wilderness Characteristics (acres)		
No.	Name	Federal	State	Total	Federal	State	Total
104	Arch & Mule Canyons	13,600	1,260	14,860	0	0	0
119	Beaver Creek	32,600	2,300	34,900	26,000	1,500	27,500
116	Behind the Rocks	7,800	1,000	8,800	3,400	500	3,900
112	Bridge Jack Mesa	27,300	3,380	30,680	23,500	2,900	26,400
113	Butler Wash	3,000	1,820	4,820	2,000	1,780	3,780
93	Cheese Box Canyon	16,080	3,050	19,130	13,600	2,800	16,400
103	Comb Ridge	16,400	1,000	17,400	14,000	800	14,800
106	Cross Canyon	2,100	490	2,590	1,400	400	1,800
107	Dark Canyon	67,400	5,400	72,800	66,400	5,400	71,800
100	Fish and Owl Creeks	28,480	5,800	34,280	26,410	5,200	31,610
120	Fisher Towers	17,400	2,100	19,500	17,000	2,100	19,100
94	Fort Knocker Canyon	12,800	800	13,600	12,800	800	13,600
115	Goldbar	13,100	2,000	15,100	6,500	1,600	8,100
114	Gooseneck	8,900	360	9,260	4,800	60	4,860
99	Grand Gulch	49,570	9,310	58,880	47,800	8,090	55,890
121	Granite Creek	6,200	500	6,700	5,400	500	5,900
95	Gravel and Long Canyons	37,100	5,100	42,200	37,100	5,100	42,200
96	Harmony Flat	10,200	600	10,800	10,100	500	10,600
111	Harts Point	63,200	9,000	72,200	18,000	1,700	19,700
117	Hatch Wash	24,100	3,500	27,600	12,000	2,100	14,100
118	Hunter Canyon	4,630	1,260	5,890	4,600	1,200	5,800
110	Indian Creek	20,850	3,810	24,660	19,000	2,640	21,640
126	Lost Spring Canyon	12,920	2,000	14,920	11,770	1,900	13,670
97	Mancos Mesa	73,900	9,300	83,200	62,600	9,000	71,600
124	Mary Jane Canyon	25,400	3,000	28,400	25,000	3,000	28,000
122	Mill Creek Canyon	6,710	5,080	11,790	2,910	1,310	4,220

Table 16-1 WILDERNESS STUDY AREAS (Continued)							
Wilderness Study Areas		Area Inventoried (acres)			Area With Wilderness Characteristics (acres)		
No.	Name	Federal	State	Total	Federal	State	Total
123	Negro Bill Canyon	13,900	2,040	15,940	2,500	900	3,400
98	Nokai Dome	93,500	7,900	101,400	93,500	7,900	101,400
101	Road Canyon	13,960	5,450	19,410	11,850	5,150	17,000
102	San Juan River	14,700	600	15,300	14,200	500	14,700
109	Shafer Canyon	3,100	300	3,400	1,900	0	1,900
108	Sheep Canyon	4,700	640	5,340	4,700	640	5,340
105	Squaw & Papoose Canyons	3,750	1,240	4,990	3,680	1,240	4,920
125	Westwater Canyon	2,990	340	3,330	2,220	340	2,560
	<b>Total</b>	<b>752,340</b>	<b>101,730</b>	<b>854,070</b>	<b>608,640</b>	<b>79,550</b>	<b>688,190</b>

assistance programs by initially petitioning the COE, or for larger projects petitioning Congress. Once petitioned, the COE can investigate a number of aspects of a given problem including various economic, technical, social and environmental issues. During the process, close coordination is maintained with local interests, the state and other impacted federal agencies.

The Corps of Engineers can also participate in environmental stream and river restorations. These can include the restoration of fish and wildlife habitat, wetland and meander restoration, restoration of riparian areas, and stabilization of riverbanks and riverbed. These projects are cost shared with a local sponsor. The Corps also has authority under its Flood Plain Management Services Program to delineate areas of potential flood and debris flow threats for local communities at no charge.

The COE has been involved with a number of water-related studies and projects within the basin. Under the Continuing Authorities Project program, the COE completed a study of flood erosion in Mill Creek upstream of the existing crossing at 300 South Street in Moab. The study was initially requested by the City of Moab to

determine the feasibility of improving the hydraulic carrying capacity of the existing flood channel. The study determined that a project was feasible and resulted in the placement of over 500 feet of rip-rap lining in Mill Creek.

The Energy and Water Development Act of 1984 directed the COE to conduct special flood control studies in Utah to determine specific ways and means to alleviate future flooding. To date, three studies have been completed for selected sections of the Colorado River and various tributaries within the Southeast Colorado River Basin.

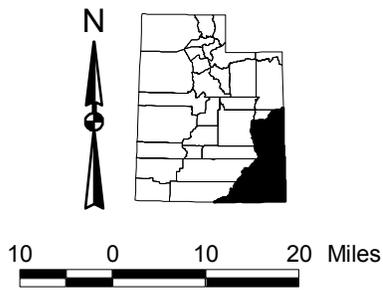
A 1975 study assessed the severity of flooding on the Colorado River and tributaries above Lee's Ferry. The study included a detailed evaluation of flooding on Mill Creek and the San Juan River Basin in Utah, Colorado and New Mexico. The study determined that only a minor flood control project was feasible on Mill Creek. However, the project was never constructed due to a lack of local support.

Two additional flood control studies have been completed for Mill Creek over the past seven years. A 1990 study identified the need for flood protection in and around the Mill Creek

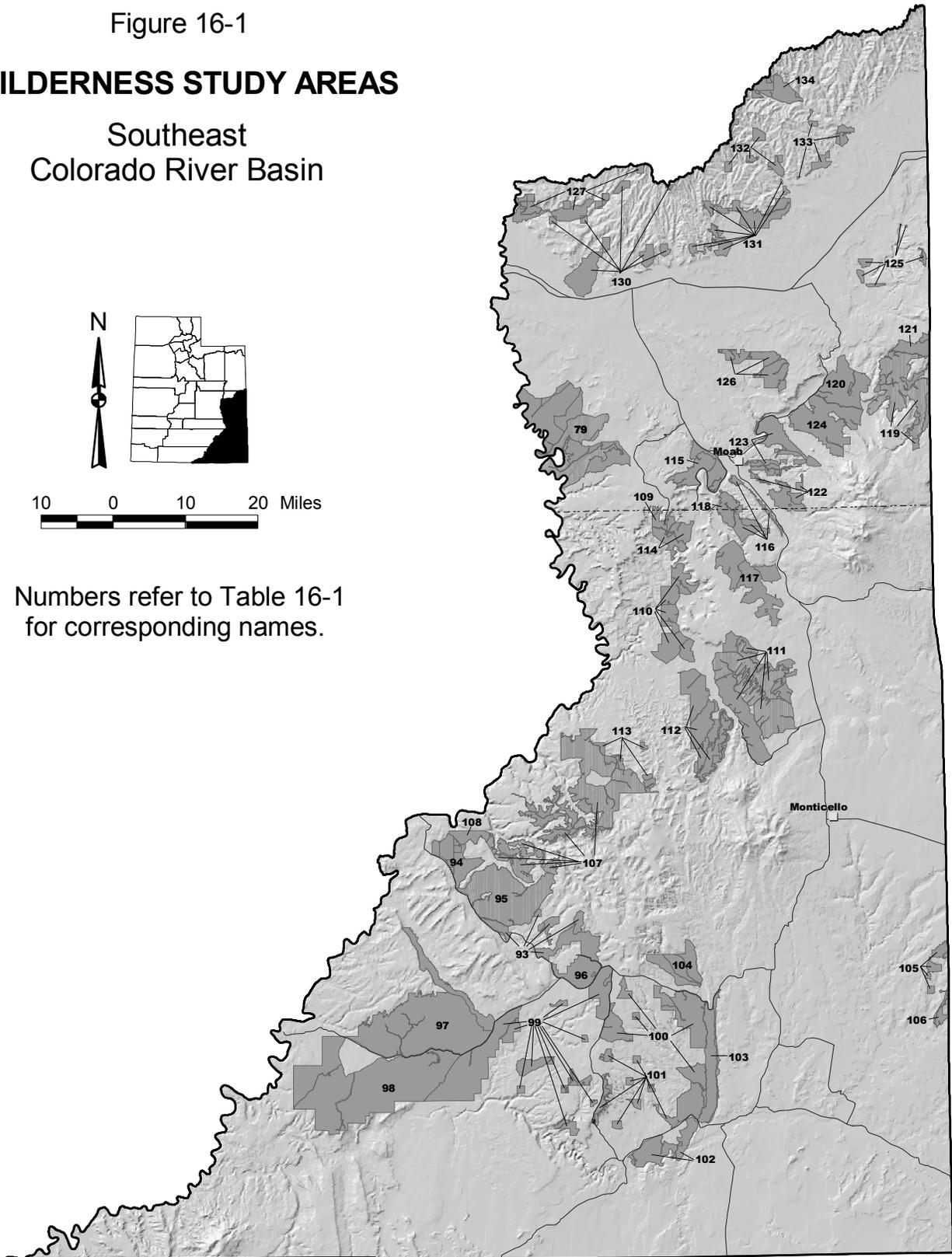
Figure 16-1

# WILDERNESS STUDY AREAS

Southeast  
Colorado River Basin



Numbers refer to Table 16-1  
for corresponding names.



Park and Recreation Area. A 1994 study attempted to determine the 100- year flood plain for Mill and Pack creeks within the City of Moab and Spanish Valley area. Although both studies identified a potential for periodic out-of-bank flow within the City of Moab, no significant flood control project was ever constructed. See Figure 13-1.

### **16.3.6 Environmental Protection Agency**

The mission of the Environmental Protection Agency (EPA) is to coordinate all efforts between federal, state and local governmental agencies to effectively abate and control pollution within the environment; more specifically, point and nonpoint source pollution to existing surface and groundwater systems. Of particular interest are the federal regulations and programs of the Federal Water Pollution Control Act of 1972, the Safe Drinking Water Act of 1974, amended, and the Clean Water Act of 1987, amended. The regulations to implement these acts have set limits on a broad spectrum of biological and chemical contaminants.

Point source pollution and non-point source pollution programs are the responsibility of the EPA but primacy has been given to the Utah Division of Water Quality. Reviews of state actions are carried out periodically.

Point source pollution programs include the National Pollutant Discharge Elimination System (NPDES) program, the Pretreatment and Municipal Pollution Prevention Program, the National Sludge Management Program and the Enforcement Program. The NPDES program requires that all wastewater treatment facilities meet or exceed limitations placed on certain water contaminants discharged into receiving streams. The Pretreatment and Municipal Pollution Prevention Program applies to industrial businesses that discharge effluent to domestic sanitary sewers with extreme concentrations of certain toxic pollutants. The National Sludge Management Program pertains to the management and disposal of wastewater sludge or biosolids.

Initially, the Construction Grants Program provided federal funding for most levels of municipal wastewater treatment facilities. However, the program was phased out and replaced with a revolving state loan program administered by the Division of Water Quality.

EPA programs designed to offer technical and financial assistance include: Clean Water Act (CWA) 104 Grants to promote and support research, investigations and training programs; CWA 106 Grants to assist states in the overall administration of individual state water quality management programs; state revolving loan funds supported by capitalization grants to construct and renovate publicly owned treatment facilities; Pilot Grants and Technical Assistance; Municipal Technology Programs; a number of Small Community Assistance Programs; and, Section 319 funds for starting basin management plans associated with non-point source pollution problems.

Federal regulations associated with Section 319 of the CWA provide standards aimed at improving the overall quality of water within a given watershed in accordance with established water use designations. These improvements generally include structural and non-structural or management measures to reduce pollutant discharge to existing streams and rivers. They also include the reduction of surface discharges contaminated with animal waste and nutrient residues from farm and ranch lands.

### **16.3.7 Farm Service Agency**

The Farm Service Agency (FSA) administers farm commodity, crop insurance and conservation programs for farmers and ranchers. As of October 1995, FSA also administers the farm ownership and operating loans formerly provided by the Farmers Home Administration. The Agricultural Conservation Program (ACP) and the Emergency Conservation Program (ECP) have been replaced by other programs in other agencies. Elements of these programs have been transferred to the Natural Resources

Conservation Service. There are two programs administered by the FSA that are water related. These are the Conservation Reserve Program and the Flood Risk Reduction Program.

The Conservation Reserve Program reduces soil erosion, protects the nation's ability to produce food and fiber, reduces sedimentation in streams and lakes, improves water quality, establishes wildlife habitat, and enhances forest and wetland resources. It encourages farmers to convert highly erodible cropland or other environmentally sensitive acreage to vegetative cover, such as tame or native grasses, wildlife plantings, trees, filterstrips, or riparian buffers. Farmers receive an annual rental payment for the term of the multi-year contract. Cost sharing is provided to establish the vegetative cover practices.

The Flood Risk Reduction Program was established to allow farmers who voluntarily enter into contracts to receive payments on lands with high flood potential. In return, participants agree to forego certain U.S. Department of Agriculture program benefits. These contract payments provide incentives to move farming operations from frequently flooded land.



Conservation seeding protects sensitive land

### **16.3.8 Federal Emergency Management Agency**

The National Flood Insurance Program (NFIP) is administered by the Federal Insurance Administration (FIA), a component of the Federal Emergency Management Agency (FEMA), an independent agency. Congress

established the NFIP with the passage of the National Flood Insurance Act of 1968. The NFIP was broadened and modified with the passage of the Flood Disaster Protection Act of 1973 and the NFIP Reform Legislation of 1994.

The NFIP enables property owners to purchase insurance protection against losses from flooding. The insurance is designed to provide an insurance alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by severe flooding events.

Participation in the NFIP is based on an agreement between local communities and the federal government which states that if a community will implement and enforce measures to reduce future flood risks in special flood hazard areas, the federal government will make flood insurance available through private insurers within the community as financial protection against flood losses which do occur.

FEMA is the federal coordinating agency for emergency response, disaster relief funding and mitigation and preparedness planning. They provide technical assistance through loans and grants following declared disasters.

Presidential Declared Disaster - After a presidential declaration of a major disaster, usually after a state request, grants are available to state and local governments for mitigation of disaster related damage.

Assistance Grants - FEMA can provide grants on a matching basis to help individual states develop and improve disaster preparedness plans and develop effective state and local emergency management organizations. Grants are also available to develop earthquake preparedness capabilities.

Flood Plain Management - FEMA can provide technical assistance to reduce potential flood losses through flood plain management planning. This includes flood hazard studies to delineate flood plains, advisory services to prepare and

administer flood plain management ordinances, and assistance to private individuals, communities, and various businesses when enrolling in the NFIP. FEMA can also assist with the acquisition of structures in critical flood plains subject to chronic flooding. Currently, the City of Moab and unincorporated San Juan County are the only public entities that are covered by the NFIP (See Section 13).

### 16.3.9 Fish and Wildlife Service

The Fish and Wildlife Service (FWS) has the responsibility for insuring the long-term conservation and protection of certain federal trust resources including threatened and endangered species, migratory birds, wetlands, and fish and wildlife resources that may be impacted by federally permitted or funded projects. Additionally, the FWS manages fish and wildlife habitat in the National Wildlife Refuge system. Authority is derived from the Endangered Species Act, the Clean Water Act, the Migratory Bird Treaty Act, the Bald Eagle Protection Act, the Fish and Wildlife Coordination Act, the National Environmental Policy Act and the National Wildlife Refuge System Administration Act.

The Endangered Species Act (ESA) does not apply directly to non-federal water-related activities where a federal permit is not required. Owners and operators of non-federal projects are not affected as long as the normal and ongoing operations do not result in the taking of one of these species.

In the event federal permits are required to develop a water resource or modify existing facilities, the Fish and Wildlife Service will review the project. The scope and overall intent of the proposed project or change will be assessed to decide the effect on fish and wildlife in the immediate area.

Endangered plants are treated differently than endangered animals on private property. Threats to these plant species will not stop development activities in an area where federal

permits are not required. The endangered, threatened and candidate species are shown in Table 16-2.

### 16.3.10 Forest Service

Water-related programs of the Forest Service include watershed management; special use authorization for water development projects; and coordination with local, state and federal agencies. They also manage wilderness areas located on national forest lands. The Forest Service manages the Manti-La Sal National Forest.

Watershed Management - Watershed protection insures that activities do not cause undue soil erosion and stream sedimentation, reduce soil productivity or otherwise degrade water quality. Water yields may be affected through snow pack and/or vegetative management as a result of timber harvests controlled by predetermined forest management plans. Potential increases may approach one-half acre-foot per acre for some treated areas, but multiple-use considerations and specific on-site conditions may limit actual increases.



Special-use permits for development

Special Use Authorization - Construction and operation of reservoirs, conveyance ditches, hydro-power facilities and other water resources developments require special use authorization and usually an annual fee. Authorization contains conditions necessary to protect the use of all other resources. Coordination of water

Table 16-2  
CANDIDATE, THREATENED AND ENDANGERED SPECIES

<u>Common Name</u>	<u>Scientific Name</u>
<u>Endangered Species</u>	
black-footed ferret	Mustela nigripes
least chub	Iotichthys phlegethontis <sup>a</sup>
peregrine falcon	Falco peregrinus
southwestern willow flycatcher	Empidonax traillii extimus
autumn butter	Ranunculus aestivalis
Colorado pikeminnow	Ptychocheilus lucins
humpback chub	Gila cypha
bonytail chub	Gila elegans
razorback sucker	Xyrauchen texanus
<u>Threatened Species</u>	
Mexican spotted owl	Strix occidentalis lucida
Utah prairie dog	Cynomys parvidens
heliotrope milkvetch	Astragalus montii
Jones cycladenia	Cycladenis humilis va. jonesii
last chance townsendia	Townsendia aprica
Ute ladies'-tresses	Spiranthes diluvialis
<u>Candidate Animal Species</u>	
spotted frog	Rana luteiventris
<sup>a</sup> Proposed to be listed as endangered.	

development projects requires communication early in the planning process to guarantee environmental concerns are addressed.

### 16.3.11 Geological Survey

The Geological Survey (USGS) was established by an act of Congress in 1879 to provide a permanent federal agency to conduct the systematic and scientific classification of the public lands and examination of the geological structure, mineral resources and products of the national domain. A number of publications have been completed by the USGS in recent years regarding water quality and groundwater storage in the basin. A list of USGS publications addressing water resources information can be

acquired from the agency's Salt Lake City Office. Also, refer to the bibliography in Section B.

Ongoing USGS activities include the gathering of additional water resources related data and the maintenance of existing data bases for various water agencies to plan, design, operate, and manage existing and potential water projects throughout the basin. The USGS is currently taking water quality data from eight field monitoring stations located at South Creek near Monticello, Recapture Creek near Blanding, San Juan River near Bluff, Colorado River at the Colorado/Utah state line, Colorado River near Cisco, Dolores River near Cisco, Castle Creek below Castleton, and Mill Creek at Sheley

Tunnel. Data for all stations is found in Table 12-1. An itemized summary of all water resources data can be obtained from the annual USGS report entitled "Water Resources Data for Utah." This data is also available on the internet. The costs to install and operate a majority of the active stream gaging stations are shared by the USGS on a 50-50 basis with state and local agencies utilizing data from these stations.

### 16.3.12 National Park Service

The National Park Service (NPS) promotes and regulates use of national parks, monuments and similar reservations to "conserve the scenery, natural historic objects and wildlife." The NPS also provides for the enjoyment of these resources in such manner and by such means as will leave them unimpaired for the benefit of future generations." The long-range objectives of the NPS are as follows:

1. To conserve and manage the parks for their highest purpose; the natural, historical and recreational resources.
2. To provide the highest quality of use and enjoyment by millions of visitors.
3. To develop the parks through inclusion of additional areas of scenic, scientific, historical and recreational value.
4. To communicate the cultural, natural, inspirational and recreational significance of the American heritage.



Arches National Park

In fulfillment of these objectives, NPS performs the following functions.

- Manages the Arches and Canyonlands national parks.
- Manages the Hovenweep, Rainbow Bridge and Natural Bridges national monuments.
- Manages the Glen Canyon National Recreation Area.
- Conducts the recreational aspects of water project implementation studies.
- Conducts congressionally authorized Wild and Scenic River, and Natural Historic and Scenic Trails studies.
- Through comparative agreements, administers recreation lands under the jurisdiction of other federal agencies.
- Provides professional and administrative support to the national, regional and park advisory boards.

### 16.3.13 Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS) provides technical and financial assistance to conserve soil, water and related resources on non-federal land through local soil conservation districts. In addition to working with individual landowners and units of government, the NRCS administers programs to inventory existing soil and snow pack conditions, protect watersheds, and to plan for both flooding and drought events.

Soil Surveys - Published soil surveys contain descriptions of an area's soils and the use, management and maps depicting the extent of these soils. The NRCS has prepared seven soil surveys to cover the basin. These surveys are: Grand County, Utah; Canyon Lands Area; San Juan County, Central Part; San Juan Area, Utah; Navajo Indian Reservation-San Juan County, Utah; La Sal Mountain Lower, San Juan

County; and La Sal Mountain Upper, San Juan County.

Snow Surveys - Through the snow survey program, the NRCS measures snow water equivalents and precipitation at either a manually measured snow course station or at a snotel site which can be accessed electronically. There are two snow courses in the basin, Buckboard Flat in the Abajo Mountains and the La Sal Mountains Lower. The two snotel sites are located at Camp Jackson in the Abajo Mountains and the La Sal Mountain site. Data from these survey stations are summarized and made available to the general public in monthly and annual reports. Data is also available on the internet. Also see Table 3-2.

Environmental Quality Incentives Program (EQIP) - The Environmental Quality Incentives Program provides technical, educational and financial assistance to eligible farmers and ranchers to address soil, water and related natural resources concerns on their lands in an environmentally beneficial and cost-effective manner. The program provides assistance to farmers and ranchers in complying with federal, state and tribal environmental laws, and encourages environmental enhancement. The program is funded through the Commodity Credit Corporation. The purposes of the program are achieved by cost-sharing the implementation of a conservation plan, which includes structural, vegetative and land management practices on eligible land. Fifty percent of the funding will be targeted at natural resources concerns relating to livestock production, primarily in priority areas.

Watershed and River Basin Planning and Installation - Technical and financial assistance is provided in cooperation with local sponsoring organizations, state and other public agencies to voluntarily plan and install watershed-based projects on private lands. The program empowers local people or decisionmakers, builds

partnerships and requires local and state funding contributions. The purpose of watershed projects includes watershed protection; flood prevention; water quality improvements; soil erosion reduction; rural, municipal and industrial water supply; irrigation water management; sedimentation control; fish and wildlife habitat enhancement and creation and restoration of wetlands and wetland functions.

Section 3 of Public Law 83-566 provides assistance to sponsoring local organizations to develop plans for watersheds not exceeding 250,000 acres. During planning, problems such as water quality, flooding, water and land management, and sedimentation are evaluated and works of improvement are proposed to alleviate problems. The resulting watershed plans estimate benefits, costs, cost-sharing rates and arrange for operation and maintenance necessary to justify federal assistance to install works of improvement.

Section 6 of Public Law 83-566 provides for cooperation with federal, state and local agencies in making investigations and surveys of river basins as a basis for the development of coordinated water resource programs. Reports of the investigations and surveys serve as guides for the development of water, land and related resources in agricultural, rural and urban areas within upstream watershed settings. They also serve as a basis for coordination with major river systems and other phases of water resource management and development.

The Emergency Watershed Protection Program (EWP) was set up by Congress to respond to emergencies created by natural disasters. It is designed to relieve imminent hazards to life and property caused by floods, fires, windstorms and other natural occurrences. The purpose of EWP is to help groups of people with a common problem. It is generally not an individual assistance program. All projects undertaken must be sponsored by a political subdivision of the state, such as a city, county, general improvement district or conservation district.



On-farm soil and water conservation

Wetlands Reserve Program - The Wetlands Reserve Program is a voluntary program offering landowners the opportunity to protect, restore, and enhance wetlands on their property. The NRCS provides technical and financial support to help landowners with their wetland restoration efforts. The goal is to achieve the greatest wetland functions and values, along with optimum wildlife habitat, on every acre enrolled in the program. This program offers landowners an opportunity to establish long-term conservation and wildlife practices and protection.

Resource Conservation and Development Program - The purpose of the Resource Conservation and Development (RC&D) program is to accelerate the conservation, development and utilization of natural resources, improve the general level of economic activity, and to enhance the environment and standard of living in authorized RC&D areas. It improves the

capacity of state, tribal and local units of government and local nonprofit organizations in rural areas to plan, develop and carry out programs for resource conservation and development. The program also establishes or improves coordination systems in rural areas. Current program objectives focus on improvement of quality of life achieved through natural resources conservation and community development which leads to sustainable communities, prudent use (development), and the management and conservation of natural resources. NRCS can provide grants for land conservation, water management, community development and environmental needs in authorized RC&D areas.

#### **16.3.14 Rural Development**

Rural Development is authorized to provide financial assistance for water and waste disposal facilities in rural areas and towns of up to 10,000 people. Priority will be given to public entities in areas smaller than 5,500 people to restore, improve or enlarge a water facility. To be eligible for loan and grant funds, water or waste disposal systems must be consistent with state or subdivision development plans and regulations. Loans for RC&D projects are also available through the service. Rural Development has provided nearly \$17 million in cost-share, loans and/or grants for projects in the basin between 1992 and 1996. □